

THE HOLMFIRTH DELUGE.—The statistics of relief afforded by charitable contributions to sufferers by the bursting of the long-neglected reservoir at Bilbary and the flooding of the Holmfirth valley and destruction of numerous mills and dwellings in the gorge, display an amount of sterling generosity and good-will that is an honour to our country; all the more especially when we consider that the catastrophe was quite easily preventible by a little outlay in repairs, which were grossly neglected by a corporation who ought to have had a strong money force subscribed against them by all those interested, as well as for immediate and necessary repairs, for the self-preservation of the community, failing those which ought to have been made by the authorised corporation. It appears from the report of the sub-committee, that 161 claims had been disposed of to 10th June, amounting to 24,834*l.* 3*s.* 6*d.* besides 667*l.* 17*s.* 7*d.* for subsequent claims. The total receipts, including donations, salvage, bank interest, &c. were 45,434*l.* 14*s.* 2*d.* There still remained a balance of 22,907*l.* 7*s.* 2*d.* for future disbursement; and, if all the subscriptions were paid up, the amount would be 37,234*l.* 12*s.* 6*d.* All the claims, with the exception of that of Mrs. Hirst, of Digley, were disposed of, and all the mills in the valley of the Holme, with the exception of Digley-mill, were either repaired or in course of reconstruction. To orphans from two to twelve years of age, the sub-committee recommended that 5*s.* (a-week) each be paid until they are sixteen years old, and arrangements had been partly entered into with the Leeds and Yorkshire Assurance Company for the payment of that sum to the orphans for 1,078*l.* The committee has since voted the sum of 4,500*l.* to be invested for the benefit of Mrs. Hirst. A recommendation that money be granted for the restoration of the reservoir was strongly opposed at first by members of deputations, who considered that to make any grant would be like giving a reward for neglect of duty on the part of the reservoir commissioners. Others urged that the staple trade of the valley (woollen manufacture) could not be restored unless the reservoir was restored, and that it was not likely it would be restored unless some grant was made. Eventually it was carried almost unanimously, "That, with a view of restoring the Holme Valley to permanent prosperity, efficient assistance be given to restore the Bilbary reservoir," and "that a sum, not exceeding 8,000*l.* be placed in the hands of trustees for the purpose of carrying out the preceding resolution." After paying all claims, the sum of 400*l.* is to be left in the hands of the sub-committee to meet any casual expenses, and the surplus to be returned *pro rata* to the subscribers, not later than the 1st November next.

ENGLISH ART-DISCOVERIES IN 18TH CENTURY.—Besides the steam engine, the blast furnace, and the spinning machinery of Arkwright, improvements were made in the manufacture of earthenware and glass, in the earlier years of George the Third's reign, which have given a prodigious extension to these valuable manufactures. In 1763, when Wedgwood perfected improvements in the Staffordshire pottery, the trade in earthenware took rank amongst the most valuable of the staple trades of the country. A noble and distinguished historian, in resuming his history of the events of the year 1763, speaking of the invention of Wedgwood, says, "So much did this branch of industry grow and thrive, that, according to Mr. Wedgwood's evidence before the House of Commons, in 1785, there were then employed upon it, in that district only, from 15,000 to 20,000 persons." "And thus," says the annalist of the trade, "are the meanest materials, the clay and flint-stones under our feet, converted into objects of the greatest utility and beauty." The abundance and cheapness of fuel induced Wedgwood to raise his English *Sturria* on the coal-field of North Staffordshire; and, fortunately for the commerce of Liverpool, the Duke of Bridgewater, Earl Gower, and other noblemen and gentlemen connected with Lancashire, Cheshire, and Staffordshire, were, at the date of Wedgwood's discoveries, forming a magnifi-

cent line of water communication from the Trent to the Mersey, which intersected the potteries and connected them with that port. As early as 1756, the manufacture of glass was introduced at Warrington; and soon after the date of the group of discoveries described, a large establishment for making plate glass was established at Ravenhead, near St. Helens. Thus were the foundations of much of the commercial greatness of Liverpool laid during the first thirteen years of the reign of George the Third, by the discoveries of Arkwright, Hargreaves, Crompton, Watt, and Wedgwood; and by the new and improved mode of transit introduced by Bridgewater and Brindley.—*Abridged from Baines's Liverpool.*

AN INQUIRY AS TO SHELL LAC.—In a lac dye and shell lac manufactory I have at this place,* several tons of a stuff called by the natives "kirea" have accumulated, and I wish to know if any of your readers at home can tell me if it can be turned to any use. It is the refuse of the shell lac left in the bags after the finer parts have been extracted from it for exportation to England. In former years the natives used to purchase it with avidity to make bangles with, but since factories have increased, the supply is greater than the demand, and I fancy there is scarcely a manufactory in the country that has not tons of it accumulated. You are aware that seed lac, mixed with fine sand, is used in this country for making grindstones. Perhaps if this "kirea" was melted down with sand or some other cheap article, it might be turned to use for lights for flooring, or some other useful purpose. At any rate I will give 10*l.* to any person who will communicate to me by letter any means by which I may turn it to a profitable account. I will also give 10*l.* to any person who will tell me how I can make seed lac colourless. At present fullers-earth, mixed with lime-water, is used for washing the seed lac before melting it into shell; but it only extracts part of the colouring matter, leaving, as everybody knows who uses it, an orange-coloured shell lac. If any of your numerous readers, then, succeed in giving me the desired information on either subject, I will send them the money by the return mail on their sending out the information.—J. B. W.

NEW COMPOSITION FOR RAILWAY AND OTHER CONSTRUCTIVE PURPOSES.—Mr. Owen Williams, of Stratford, has patented a composition to be used in railway and other structures, in lieu of iron, wood, or stone, and for building purposes generally. One of these compositions consists of 190 lbs. pitch, 41 gallons creosote, 18 lbs. resin, 15 lbs. sulphur, 45 lbs. finely-powdered lime, 108 lbs. gypsum, and 27 cubic feet sand, breeze, scoria, bricks, stone, or other hard materials, broken up and passed through a sieve with half-inch meshes. The sulphur is first melted with 30 lbs. of the pitch, after which the resin, and then the remainder of the pitch is added with the lime and gypsum, by degrees, and well stirred till the mixture boils. The earthy and stony matters are then added, and the creosote mixed in, when the composition is ready for moulding into blocks, for which pressure is applied. The claim is the mode of preparing such composition, particularly the use of sulphur therein.

MORE ABOUT GOLD IN AUSTRALIA.—Mr. E. Wilson, of the Royal Exchange, has published several pamphlets on this subject,—one by "Nugget," on "Australia and her Treasures;" another by Mr. John Fairfax, joint-proprietor and joint-editor of the *Sydney Morning Herald*, "On the Colonies and Gold Fields of Australia, with Advice to Emigrants;" and a third by Mr. W. H. Hall, fourteen years resident in Australia, on his fortunate "Practical Experience at the Diggins" there. The last is a graphic and well-written, though modest and unpretending, narrative: the second is partly a condensation of the news extracted from the *Sydney Morning Herald*; and the first comprises a brief and rapid miscellany of interesting matter in regard to the colony and its agricultural as well as its gold fields, for behoof of emigrants.

* The address may be had at THE BUILDER'S office.

ANTIQUARIAN DISCOVERIES IN GLASGOW: THE OLD BISHOP'S CASTLE.—The excavations and levelings of the infirmary mound now in progress, for the purpose of improving the approach to the cathedral, says the *Glasgow Herald*, are looked upon with much interest by our local antiquaries; for the site is that on which the Archbishop's castle or palace stood, the surface remains of which were only removed at the close of last century. While Mr. Rankine's workmen were engaged in razing part of the foundations of the Castlefort wall, they came upon three cannon balls, each about six inches in diameter, and weighing nearly 36 lbs. a piece. Two of them were got a few yards within the gateway of the infirmary: the other was about as far on the outside. Besides a groat and Danish pipe, several other articles have been discovered. Amongst these is a stone with a square hole in it, which is conjectured by some to have been the pedestal in which the foot of a gallows rested. There have also been found several beams of black oak, about from six inches to one foot in diameter, some with dools in them and checked. One of these beams, the largest, and circular, has a round hole about six inches in diameter, cut transversely into it. A few yards within the railing enclosing the mound, and encircling it, is a very soft portion of the ground, which is conjectured to have formed part of a moat round the castle.

PERL STATUES.—The Huddersfield statue is to be of Sicilian marble, and 10 feet 6 inches high. There has been a dispute amongst the committee as to the artist. Mr. Bromley was selected, but it now appears that there is a desire to withdraw the decision in his favour by some arrangement with him, and to employ Mr. Behnes, with whom also negotiations have now been entered into. The pedestal will be a separate contract.—The inauguration of the statue of Sir Robert, at Montrose, took place on Saturday week, in the presence of a large concourse of people. The statue, erected by subscriptions of the inhabitants, was delivered over in their name to the guardianship of the magistrates and town-council. It was executed by Mr. Handyside Ritchie, of Edinburgh. It stands in the High-street, opposite the house once belonging to the famous Marquis of Montrose.

PROPOSED LIBRARY, NEW YORK.—The proposed arrangement of the new library at the national capitol, as sketched in *Norton's Literary Gazette* (U.S.), embraces a suite of five rooms, extending in the aggregate 302 feet. There will be two stories of alcoves, the second one receding three feet from the first, so as to admit of a gallery with but little projection; and above the second story of alcoves will be a third story, with bookcases against the walls. The whole interior is to be of iron, and fireproof, so as to avoid the possibility of another calamitous fire, and "is to be finished in a style of great architectural beauty." The shelves will be of porcelain. The expense will amount to 72,000 dollars; and the library is calculated, when finished, to accommodate 50,000 volumes.

SUFFOLK FINE-ART ASSOCIATION.—The opening of the exhibition by this association was to take place on Tuesday last. The paintings are said to be numerous, and to constitute a good collection, many of them done by well-known artists. The committee have made arrangements for a musical promenade on Friday evenings.

SANITARY STATE OF MERTHYR TIDFILL.—A correspondent of a Welsh paper complains that although plans for the sewerage of the town are prepared, and an Act for water supply passed, nothing is done by the ironmasters to have the necessary works carried out, but, on the contrary, underhand influence exercised to throw obstacles in the way rather; and that the trade with Dantzic is likely to yield importations of a very different kind from heretofore, as "the cholera is in Dantzic," and Merthyr Tidfll is but too likely to become again a "city of the plague." It would be well that hundreds of other towns besides Merthyr Tidfll were awakened to a sense of the deadly peril that is impending.